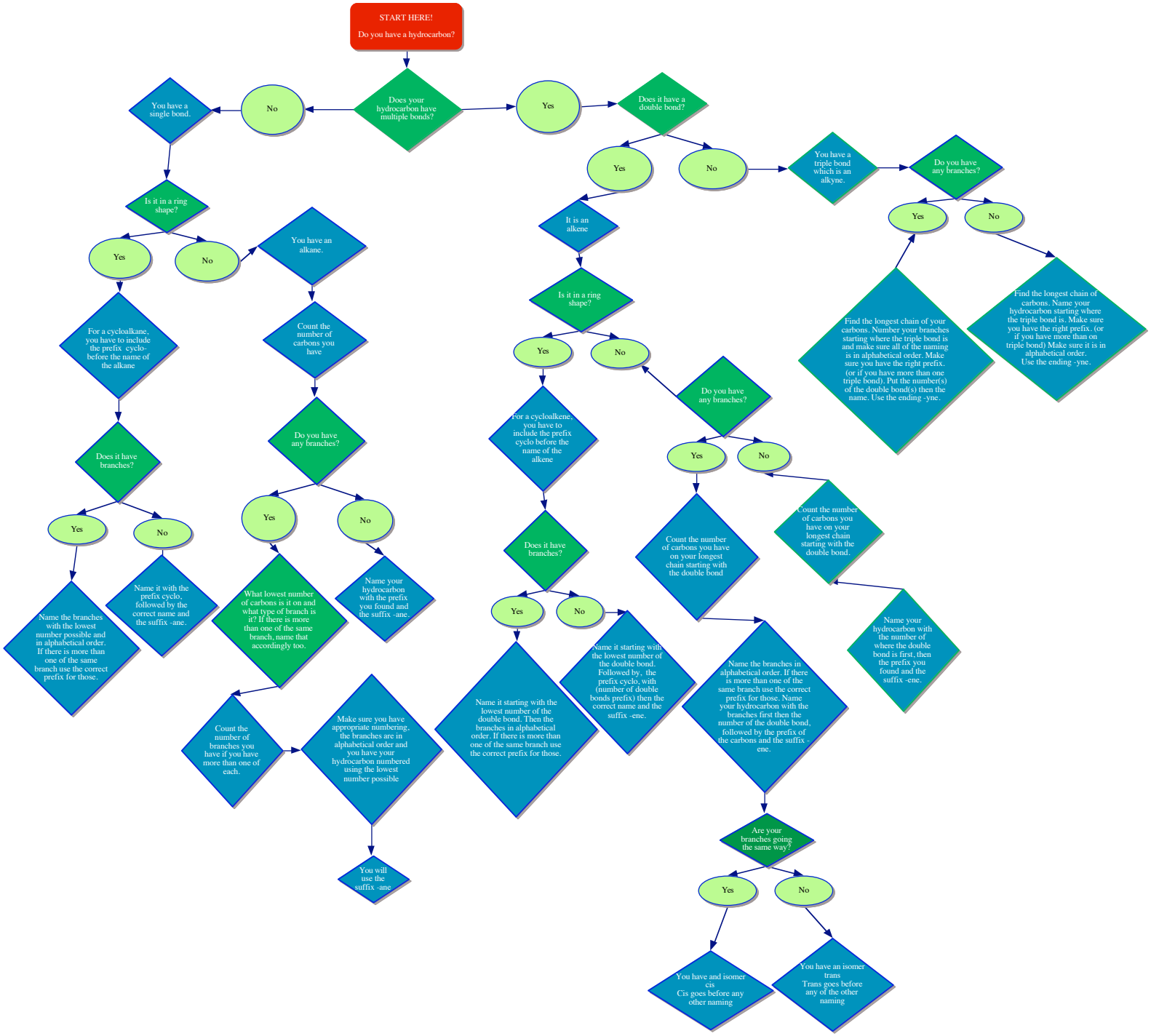
START HERE!
Do you have a hydrocarbon?
Does your hydrocarbon have multiple bonds?
No
You have a single bond.
Is it in a ring shape?
Yes
No
For a cycloalkane, you have to include the prefix cyclo- before the name of the alkane
Does it have branches?
Yes
No
Name the branches with the lowest number possible and in alphabetical order. If there is more than one of the same branch use the correct prefix for those.
Name it with the prefix cyclo, followed by the correct name and the suffix -ane.
You have an alkane.
Count the number of carbons you have
Do you have any branches?
Yes
No
What lowest number of carbons is it on and what type of branch is it? If there is more than one of the same branch, name that accordingly too.
Name your hydrocarbon with the prefix you found and the suffix -ane.
Count the number of branches you have if you have more than one of each.
Make sure you have appropriate numbering, the branches are in alphabetical order and you have your hydrocarbon numbered using the lowest number possible
You will use the suffix -ane
Yes
Does it have a double bond?
Yes
No
It is an alkene
Is it in a ring shape?
Yes
No
For a cycloalkene, you have to include the prefix cyclo before the name of the alkene
Does it have branches?
Yes
No
Name it starting with the lowest number of the double bond. Then the branches in alphabetical order. If there is more than one of the same branch use the correct prefix for those.
Name it starting with the lowest number of the double bond. Followed by, the prefix cyclo, with (number of double bonds prefix) then the correct name and the suffix -ene.
Do you have any branches?
Yes
No
Count the number of carbons you have on your longest chain starting with the double bond
Name the branches in alphabetical order. If there is more than one of the same branch use the correct prefix for those. Name your hydrocarbon with the branches first then the number of the double bond, followed by the prefix of the carbons and the suffix -ene.
Are your branches going the same way?
Yes
No
You have and isomer cis
Cis goes before any other naming
You have an isomer trans
Trans goes before any of the other naming
Count the number of carbons you have on your longest chain starting with the double bond.
Name your hydrocarbon with the number of where the double bond is first, then the prefix you found and the suffix -ene.
You have a triple bond which is an alkyne.
Do you have any branches?
Yes
No
Find the longest chain of carbons. Number your branches starting where the triple bond is and make sure all of the naming is in alphabetical order. Make sure you have the right prefix. (or if you have more than one triple bond). Put the number(s) of the double bond(s) then the name. Use the ending -yne.
Find the longest chain of carbons. Name your hydrocarbon starting where the triple bond is. Make sure you have the right prefix. (or if you have more than on triple bond) Make sure it is in alphabetical order.
Use the ending -yne.